

## CLAIMS

1. An optoelectronic module array system, comprising:

a host board;

a plurality of daughter cards that are each operably connected perpendicularly to the host board, the plurality of daughter cards being positioned parallel to one another; and

a plurality of optoelectronic modules that are each connected to a respective one of the daughter cards such that a surface defining the width of each optoelectronic module is positioned parallel to a surface of the respective daughter card, the daughter card surface being perpendicular with respect to the host board.

2. An optoelectronic module array system as defined in claim 1, wherein the optoelectronic module is an optical transceiver module.

3. An optoelectronic module array system as defined in claim 1, wherein the daughter card surface of each daughter card includes a connector receptacle for receiving a card-edge connector of a respective one of the optoelectronic modules.

4. An optoelectronic module array system as defined in claim 1, further comprising:

a plurality of cages, wherein each cage is connected to the daughter card surface of a respective one of the plurality of daughter cards, and wherein each cage receives a respective one of the plurality of optoelectronic modules.

5. An optoelectronic module array system as defined in claim 4, wherein each optoelectronic device operably connects to the respective daughter card via the respective cage.

6. An optoelectronic module array system as defined in claim 5, wherein each cage is three-sided and provides electromagnetic shielding for the respective optoelectronic module.

7. An optoelectronic module array system as defined in claim 5, wherein each optoelectronic module includes a latching mechanism that selectively secures the optoelectronic module in a fixed position with respect to the host board.

8. An optoelectronic module array system as defined in claim 7, wherein each latching mechanism includes a lock pin that engages a hole defined in the respective cage to secure the optoelectronic module.

9. An optoelectronic module array system as defined in claim 1, wherein two optoelectronic modules are connected to each daughter card.

10. An optical device, comprising:

an optical transceiver module array system, including:

a host board;

a plurality of daughter cards that are each operably connected perpendicularly to the host board, the plurality of daughter cards being positioned parallel to one another; and

a plurality of transceiver modules that are each connected to a respective one of the daughter cards such that each transceiver module is oriented in an edge-on orientation with respect to the host board.

11. An optical device as defined in claim 10, further comprising a plurality of optical fiber connectors that are each connected to optical ports of a respective one of the transceiver modules, wherein each optical fiber connector includes a release sleeve that slides along the optical fiber connector to engage and disengage the connector to and from the optical ports.

12. An optical device as defined in claim 10, further comprising:

a plurality of cages, wherein each cage is connected to a respective one of the plurality of daughter cards, and wherein each cage receives a respective one of the plurality of optoelectronic modules.

13. An optical device as defined in claim 12, further comprising a latching mechanism that is attached to each transceiver module, comprising:

a rotatable bail;

a pivot block having a lock pin, the pivot block being pivotally attached to the rotatable bail, wherein the lock pin engages a portion of the optical transceiver module array system when the bail and the pivot block are positioned in a specified configuration to selectively secure the transceiver module.

14. An optical device as defined in claim 13, wherein the lock pin engages a portion of the respective cage that receives the transceiver module.

15. An optical device as defined in claim 13, wherein each latching mechanism further includes two curved recesses that are defined in surfaces of the respective transceiver module to each movably receive an end portion of the bail.

16. An optical transceiver module array system, comprising:

a host board;

a plurality of daughter cards that are each perpendicularly connected to the host board, the plurality of daughter cards being positioned parallel to one another;

a plurality of cages that are each connected to a respective one of the daughter cards; and

a plurality of transceiver modules that are each received by a respective one of the cages, wherein the cages and daughter cards are positioned such that spacing between each transceiver module is minimized.

17. An optical transceiver module array system as defined in claim 16, wherein a connector receptacle is included on each daughter card to electrically connect the transceiver module to the respective daughter card and host board.

18. An optical transceiver module array system as defined in claim 17, wherein each cage provides a ground plane for the respective transceiver module.

19. An optical transceiver module array system as defined in claim 18, wherein each transceiver module includes two optical ports that are oriented with respect to the host board such that an imaginary line that passes through a central portion of both optical ports intersects the host board at substantially a right angle.

20. An optical transceiver module array system as defined in claim 19, further comprising a plurality of optical fiber connectors that are each connected to the optical ports of respective transceiver modules, wherein each optical fiber connector includes a release sleeve that is slidably engaged with the optical fiber connector.

21. An optical transceiver module array system as defined in claim 20, wherein each optical fiber connector is an LC duplex connector having a connector latch for disengaging the LC duplex connector from a respective one of the transceiver modules.

22. An optical transceiver module array system as defined in claim 21, wherein each release sleeve is shaped to correspond to the exterior shape of the respective LC duplex connector.

23. An optical transceiver module array system as defined in claim 22, wherein the release sleeve includes a body defining open first and second ends, wherein a portion of the body further defines a curved inner surface.

24. An optical transceiver module array system as defined in claim 23, wherein the release sleeve is selectively slidable between a first position and a second position, and wherein in the second position the curved inner surface engages the connector latch of the LC duplex connector to enable it to disengage from a respective one of the transceiver modules.

25. An optical transceiver module array system as defined in claim 24, wherein each cage defines a three-sided structure.

26. An optical transceiver module array system as defined in claim 24, wherein the optical transceivers are positioned on opposing surfaces of the host board.

27. An optical transceiver module array system as defined in claim 25, wherein the release sleeve is composed of a thermoplastic material.

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